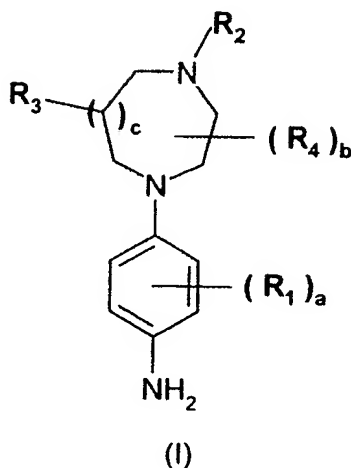


WHAT IS CLAIMED IS:

1. A compound of formula (I), and the addition salts thereof



wherein:

- **a** ranges from 0 to 4, it being understood that when **a** is greater than or equal to 2, then the radicals R_1 may be identical or different,
- **b** ranges from 0 to 4, it being understood that when **b** is greater than or equal to 2, then the radicals R_4 may be identical or different,
- **c** is equal to 0 or 1,
- R_1 is chosen from a halogen atom; C_1 - C_8 aliphatic and alicyclic, saturated and unsaturated hydrocarbon-based chains, wherein at least one carbon atom is optionally replaced with at least one entity chosen from oxygen, nitrogen, silicon, and sulphur atoms and an SO_2 group; and an onium radical Z; with the proviso that the radical R_1 does not comprise a peroxide bond or diazo, nitro or nitroso radicals,
- R_2 comprises an onium radical Z, wherein an onium radical is a nitrogen-based quaternary radical,

- **R₃** is chosen from
 - an alkyl radical;
 - an alkenyl radical;
 - an alkynyl radical;
 - a hydroxyl radical;
 - a hydroxyalkyl radical;
 - an alkoxy radical;
 - an alkoxyalkyl radical;
 - an alkylcarbonyl radical;
 - a hydroxyalkoxyalkyl radical;
 - an amino radical;
 - a monoalkylamino radical;
 - a dialkylamino radical;
 - an aminoalkyl radical;
 - an aminoalkyl radical wherein the amine is monosubstituted or disubstituted with at least one radical chosen from alkyl, acetyl and hydroxyalkyl radicals;
 - a hydroxyl radical;
 - a aminoalkyl radical;
 - a carboxyl radical;
 - a carboxyalkyl radical;
 - a carbamoyl radical;
 - a carbamoylalkyl radical;
 - an alkoxycarbonyl radical;

- a monoalkylaminocarbonyl radical;
- a dialkylaminocarbonyl radical;
- a monoalkylaminocarbonylalkyl radical; and
- a dialkylaminocarbonylalkyl radical;
- **R₄** is chosen from
 - an alkyl radical;
 - an alkenyl radical;
 - an alkynyl radical;
 - a hydroxyalkyl radical;
 - an alkoxyalkyl radical;
 - an alkylcarbonyl radical;
 - a hydroxyalkoxyalkyl radical;
 - an aminoalkyl radical;
 - an aminoalkyl radical wherein the amine is monosubstituted or disubstituted with at least one radical chosen from alkyl, acetyl and hydroxyalkyl radicals;
 - a hydroxyl radical;
 - a aminoalkyl radical;
 - a carboxyl radical;
 - a carboxyalkyl radical;
 - a carbamoyl radical;
 - a carbamoylalkyl radical;
 - an alkoxycarbonyl radical;
 - a monoalkylaminocarbonyl radical;

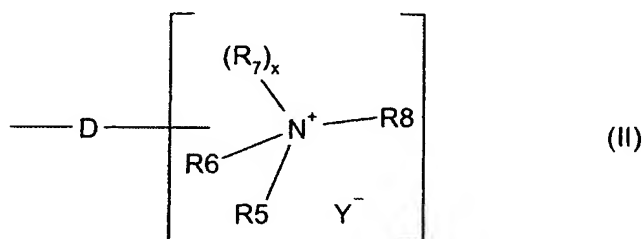
- a dialkylaminocarbonyl radical;
- a monoalkylaminocarbonylalkyl radical; and
- a dialkylaminocarbonylalkyl radical.

2. The compound according to Claim 1, wherein R_1 is chosen from C_1 - C_4 alkyl radicals, C_1 - C_4 alkoxyalkyl radicals, C_1 - C_4 hydroxyalkyl radicals, C_1 - C_4 aminoalkyl radicals, C_1 - C_4 alkoxy radicals, C_1 - C_4 hydroxyalkoxy radicals, and C_1 - C_4 carboxyalkyl radicals.

3. The compound according to Claim 2, wherein R_1 is chosen from methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy and 2-hydroxyethoxy radicals.

4. The compound according to Claim 1, wherein a is equal to 0 or 1.

5. The compound according to Claim 1, wherein R_2 is an onium radical Z of formula (II)



wherein:

- D is a linker arm chosen from a covalent bond and from linear and branched C_1 - C_{14} alkylene chains, which may comprise at least one hetero atom chosen from oxygen, sulphur and nitrogen, and which may be substituted with at least one radical chosen from hydroxyl and amino radicals, and which may further optionally comprise at least one carbonyl radical;

- R₈, R₅ and R₆, which may be identical or different, are each separately chosen from C₁-C₁₅ alkyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; (C₁-C₆)alkoxy(C₁-C₆)alkyl radicals; aryl radicals; benzyl radicals; C₁-C₆ carbamoylalkyl radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; C₁-C₆ aminoalkyl radicals; C₁-C₆ aminoalkyl radicals wherein the amine is mono- or disubstituted with at least one radical chosen from C₁-C₄ alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; and quaternary ammonium radicals;
- R₈, R₅ and R₆ together, in pairs, form, with the nitrogen atom to which they are attached, a saturated 4-, 5-, 6- or 7-membered carbon-based ring optionally comprising at least one hetero atom, wherein the ring may optionally be substituted with a radical chosen from hydroxyl radicals, C₁-C₆ alkyl radicals, C₁-C₆ monohydroxyalkyl radicals, C₂-C₆ polyhydroxyalkyl radicals, C₁-C₆ alkoxy radicals, tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals, carbamoyl radicals, carboxyl radicals, (C₁-C₆)alkylcarbonyl radicals, amino radicals, and amino radicals mono- and disubstituted with at least one radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals;
- R₇ is chosen from C₁-C₆ alkyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; aryl radicals; benzyl radicals; C₁-C₆ aminoalkyl radicals; C₁-C₆ aminoalkyl radicals wherein the amine is mono- or disubstituted with at least one radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ carboxyalkyl radicals; C₁-C₆ carbamoylalkyl radicals; C₁-C₆ trifluoroalkyl radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; C₁-C₆ sulphonamidoalkyl radicals; (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radicals; (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radicals; (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radicals; N-

(C₁-C₆)alkylcarbamoyl(C₁-C₆)alkyl radicals; and N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radicals;

- x is equal to 0 or 1, with the proviso that
 - when x = 0, then the linker arm D is attached to the nitrogen atom bearing the radicals R₅, R₆ and R₈,
 - when x = 1, then two of the radicals R₅, R₆ and R₈ form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and the linker arm D is linked to a carbon atom of the saturated ring;
- Y⁻ is a counterion.

6. The compound according to Claim 5, wherein:

x is equal to 0, and

R₅, R₆ and R₈ are each separately chosen from C₁-C₆ alkyl radicals, C₁-C₄ monohydroxyalkyl radicals, C₂-C₄ polyhydroxyalkyl radicals, (C₁-C₆)alkoxy(C₁-C₄)alkyl radicals, C₁-C₆ carbamoyl alkyl radicals, and tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals, or wherein R₈ and R₅ together form a ring chosen from azetidine, pyrrolidine, piperidine, piperazine and morpholine rings, and wherein R₆ is chosen from C₁-C₆ alkyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; C₁-C₆ aminoalkyl radicals; aminoalkyl radicals mono- and disubstituted with at least one radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ carbamoylalkyl radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radicals; and N-(C₁-C₆)alkylcarbamoyl(C₁-C₆)alkyl radicals.

7. The compound according to Claim 5, wherein

x is equal to 1;

R₇ is chosen from C₁-C₆ alkyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; C₁-C₆ aminoalkyl radicals; C₁-C₆ aminoalkyl radicals wherein the amine is mono- or disubstituted with at least one radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ carbamylalkyl radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radicals; and N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radicals;

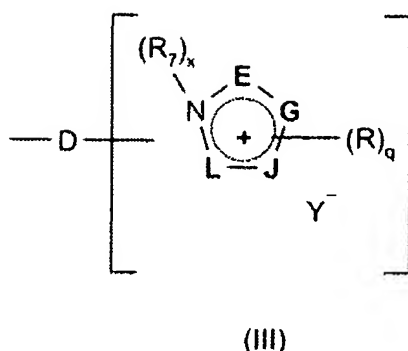
R₈ and R₅ together form a ring chosen from azetidine, pyrrolidine, piperidine, piperazine and morpholine rings; and

R₆ is chosen from C₁-C₆ alkyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; C₁-C₆ aminoalkyl radicals; C₁-C₆ aminoalkyl radicals wherein the amine is mono- or disubstituted with at least one radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ carbamoylalkyl radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radicals; and N-(C₁-C₆)alkylcarbamoyl(C₁-C₆)alkyl radicals.

8. The compound according to Claim 5, wherein R₂ comprises a trialkylammonium alkyl radical, and further wherein the alkyl linking R₂ to the ring is optionally substituted with at least one hydroxyl group.

9. The compound according to Claim 5, wherein D is chosen from a covalent bond and an alkylene chain that may optionally be substituted and/or may comprise a carbonyl group.

10. The compound according to Claim 1, wherein R₂ is an onium radical Z of formula (III)



wherein:

- D is a linker arm chosen from a covalent bond and from linear and branched C₁-C₁₄ alkylene chains that may optionally comprise at least one hetero atom chosen from oxygen, sulphur and nitrogen, and that may be optionally substituted with at least one radical chosen from hydroxyl and amino radicals, and that may further optionally comprise at least one carbonyl radical;
- the ring members E, G, J and L, which may be identical or different, are chosen from carbon, oxygen, sulphur and nitrogen atoms to form a ring chosen from pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole and isothiazole rings,
- q is an integer ranging from 1 to 4;
- R, which may be identical or different, is chosen from a hydrogen atom, halogen atoms, hydroxyl radicals, C₁-C₆ alkyl radicals, C₁-C₆ monohydroxyalkyl radicals, C₂-C₆ polyhydroxyalkyl radicals, C₁-C₆ alkoxy radicals, tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals, carbamoyl radicals, carboxyl radicals, C₁-C₆ alkylcarbonyl radicals, amino radicals, amino radicals mono- and disubstituted with a radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ monohydroxyalkyl radicals C₂-C₆ polyhydroxyalkyl radicals, and quaternary ammonium radicals;

- R₇ is chosen from C₁-C₆ alkyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; aryl radicals; benzyl radicals; C₁-C₆ aminoalkyl radicals, C₁-C₆ aminoalkyl radicals wherein the amine is substituted with a radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ carboxyalkyl radicals; C₁-C₆ carbamoylalkyl radicals; C₁-C₆ trifluoroalkyl radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; C₁-C₆ sulphonamidoalkyl radicals; (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radicals; (C₁-C₆)-alkylsulphinyl(C₁-C₆)alkyl radicals; (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radicals; N-(C₁-C₆)alkylcarbamoyl(C₁-C₆)alkyl radicals; N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radicals; and quaternary ammonium radicals;
- x is equal to 0 or 1, with the proviso that
 - when x = 0, the linker arm D is attached to the nitrogen atom,
 - when x = 1, the linker arm D is attached to one of the ring members E, G, J or L, and
- Y⁻ is a counterion.

11. The compound according to Claim 10, wherein the ring members E, G, J and L form a ring chosen from pyrrole, imidazole, pyrazole, oxazole, thiazole and triazole rings.

12. The compound according to Claim 11, wherein the ring members E, G, J and L form an imidazole ring.

13. The compound according to Claim 10, wherein x is equal to 0 and D is chosen from a covalent bond and an alkylene chain that may be optionally substituted and/or that may optionally comprise a carbonyl function.

14. The compound according to Claim 10, wherein x is equal to 0 and R is chosen from a hydrogen atom, hydroxyl radicals, C₁-C₆ alkyl radicals, C₁-C₆ monohydroxyalkyl radicals, C₂-C₆ polyhydroxyalkyl radicals, C₁-C₆ alkoxy radicals, tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals, carbamoyl radicals, C₁-C₆ alkylcarbonyl radicals, amino radicals, amino radicals mono- and disubstituted with at least one radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ monohydroxyalkyl radicals and C₂-C₆ polyhydroxyalkyl radicals.

15. The compound according to Claim 10, wherein

x is equal to 1,

R₇ is chosen from C₁-C₆ alkyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; C₁-C₆ aminoalkyl radicals; C₁-C₆ aminoalkyl radicals wherein the amine is mono- or disubstituted with at least one radical chosen from (C₁-C₆)alkyl radicals, (C₁-C₆)alkylcarbonyl radicals, carbamoyl radicals and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ carbamoylalkyl radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radicals; N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radicals; and

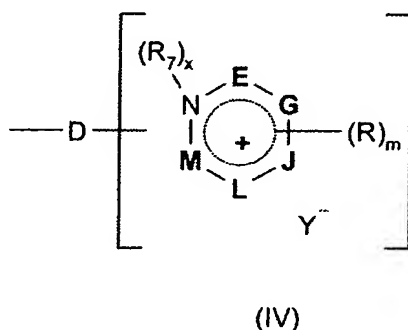
R is chosen from a hydrogen atom, a hydroxyl radical, C₁-C₆ alkyl radicals, C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals, C₁-C₆ alkoxy radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; carbamoyl radicals; C₁-C₆ alkylcarbonyl radicals; amino radicals; amino radicals mono- and disubstituted with at least one radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals.

16. The compound according to Claim 15, wherein R is chosen from a hydrogen atom and alkyl radicals that may optionally be substituted, and R₇ is an alkyl radical that may optionally be substituted.

17. The compound according to Claim 16, wherein R is chosen from hydrogen; an alkyl radical; alkyl radicals substituted with at least one hydroxyl; alkyl radicals substituted with at least one amino; a carboxyl radical; a carbamoyl radical; an amino radical; and a hydroxyl radical.

18. The compound according to Claim 17, wherein R is chosen from hydrogen; a hydroxyl radical; a methyl radical; an amino radical; a hydroxymethyl radical; and an aminomethyl radical.

19. The compound according to Claim 1, wherein R_2 is an onium radical Z of formula (IV)



wherein:

- D is a linker arm chosen from a covalent bond and from linear and branched C_1 - C_{14} alkylene chains, which may comprise at least one hetero atom chosen from oxygen, sulphur and nitrogen atoms, and which may optionally be substituted with at least one radical chosen from hydroxyl and amino radicals, and further may optionally comprise at least one carbonyl radical;
- the ring members E, G, J, L and M, which may be identical or different, are chosen from carbon, oxygen, sulphur and nitrogen atoms and form a ring chosen from pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

- m is an integer ranging from 1 to 5;
- R, which may be identical or different, is chosen from a hydrogen atom, halogen atoms, hydroxyl radicals, C₁-C₆ alkyl radicals, C₁-C₆ monohydroxyalkyl radicals, C₂-C₆ polyhydroxyalkyl radicals, C₁-C₆ alkoxy radicals, tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals, carbamoyl radicals, carboxyl radicals, C₁-C₆ alkylcarbonyl radicals, amino radicals, amino radicals substituted with a radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; and quaternary ammonium radicals;
- R₇ is chosen from C₁-C₆ alkyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; aryl radicals; benzyl radicals; C₁-C₆ aminoalkyl radicals; C₁-C₆ aminoalkyl radicals wherein the amine is mono- or disubstituted with at least one radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ carboxyalkyl radicals; C₁-C₆ carbamoylalkyl radicals; C₁-C₆ trifluoroalkyl radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; C₁-C₆ sulphonamidoalkyl radicals; (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radicals; (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radicals; (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radicals; N-(C₁-C₆)alkylcarbamoyl(C₁-C₆)alkyl radicals; N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radicals; and quaternary ammonium radicals;
- x is equal to 0 or 1, with the proviso that
 - when x = 0, the linker arm D is attached to the nitrogen atom,
 - when x = 1, the linker arm D is attached to one of the ring members chosen from E, G, J, L and M; and
- Y⁻ is a counterion.

20. The compound according to Claim 19, wherein the ring members E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

21. The compound according to Claim 19, wherein

x is equal to 0, and

R is chosen from a hydrogen atom, hydroxyl radicals, C₁-C₆ alkyl radicals, C₁-C₆ monohydroxyalkyl radicals, C₂-C₆ polyhydroxyalkyl radicals, C₁-C₆ alkoxy radicals, tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals, carbamoyl radicals, C₁-C₆ alkylcarbonyl radicals, amino radicals, amino radicals mono- and disubstituted with at least one radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ monohydroxyalkyl radicals and C₂-C₆ polyhydroxyalkyl radicals.

22. The compound according to Claim 19, wherein

x is equal to 1;

R₇ is chosen from C₁-C₆ alkyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; C₁-C₆ aminoalkyl radicals, C₁-C₆ aminoalkyl radicals wherein the amine is mono- or disubstituted with at least one radical chosen from (C₁-C₆)alkyl radicals, (C₁-C₆)alkylcarbonyl radicals, carbamoyl radicals, and (C₁-C₆)alkylsulphonyl radicals; C₁-C₆ carbamoylalkyl radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radicals; N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radicals; and

R is chosen from a hydrogen atom, hydroxyl radicals, C₁-C₆ alkyl radicals; C₁-C₆ monohydroxyalkyl radicals; C₂-C₆ polyhydroxyalkyl radicals; C₁-C₆ alkoxy radicals; tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radicals; carbamoyl radicals; C₁-C₆ alkylcarbonyl radicals; amino radicals; amino radicals mono- or disubstituted with at least one radical chosen from (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, carbamoyl and (C₁-C₆)alkylsulphonyl radicals.

23. The compound according to Claim 22, wherein R is chosen from a hydrogen atom and alkyl radicals that may optionally be substituted, and R₇ is an alkyl radical that may optionally be substituted.

24. The compound according to Claim 23, wherein R is chosen from hydrogen; an alkyl radical; alkyl radicals substituted with at least one hydroxyl; alkyl radicals substituted with at least one amino; a carboxyl radical; a carbamoyl radical; an amino radical; and a hydroxyl radical.

25. The compound according to Claim 24, wherein R is chosen from hydrogen and from at least one radical chosen from hydroxyl, methyl, amino, hydroxymethyl and aminomethyl radicals.

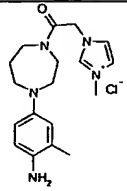
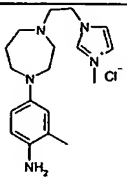
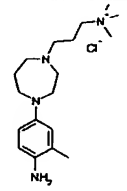
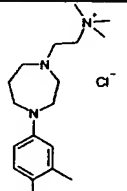
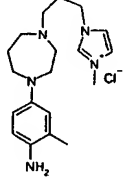
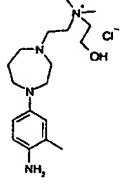
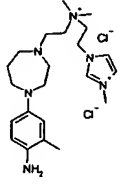
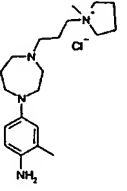
26. The compound according to Claim 1, wherein either **b** is equal to zero, or R₄ is chosen from an alkyl radical; alkyl radicals substituted with at least one hydroxyl; alkyl radicals substituted with at least one amino; a carboxyl radical; and a carbamoyl radical.

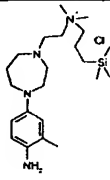
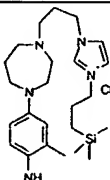
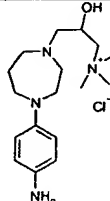
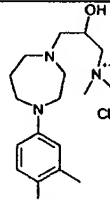
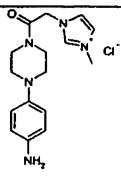
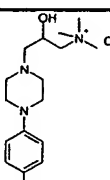
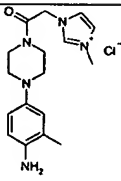
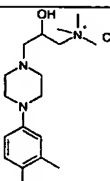
27. The compound according to Claim 1, wherein R₃ is chosen from hydrogen; a hydroxyl radical; an amino radical; an alkyl radical; alkyl radicals substituted with at least one hydroxyl; alkyl radicals substituted with at least one amino; a carboxyl radical; and a carbamoyl radical.

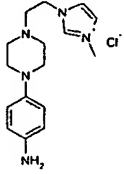
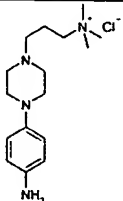
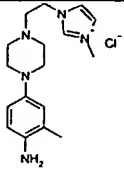
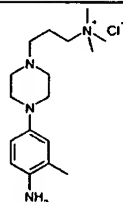
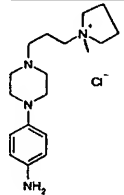
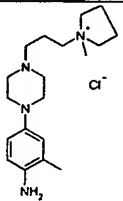
28. The compound according to Claim 1, wherein counterion Y⁻ is chosen from halogens, a hydroxide, a hydrogen sulphate, an acetate, a tartrate and (C₁-C₆)alkyl sulphates.

29. The compound according to Claim 1, chosen from the following compounds

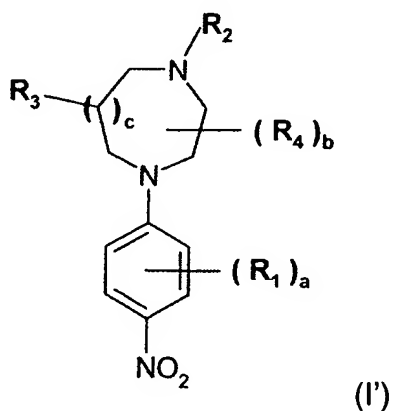
	3-{2-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]-2-oxoethyl}-1-methyl-3H-imidazol-1-ium chloride		3-{2-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]ethyl}-1-methyl-3H-imidazol-1-ium chloride
	{3-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]propyl}-trimethylammonium chloride		{2-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]ethyl}trimethylammonium chloride
	1-{3-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]propyl}-1-methylpyrrolidinium chloride		{2-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]ethyl}-(2-hydroxyethyl)dimethylammonium chloride
	{3-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]ethyl}dimethyl(ethyl-2-methyl-3H-imidazol-1-ium chloride)ammonium chloride		3-{2-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]propyl}-1-methyl-3H-imidazol-1-ium chloride
	{2-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]ethyl}dimethyl-(3-(trimethylsilyl)propyl)ammonium chloride		3-{2-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]ethyl}-1-(3-(trimethylsilyl)propyl)-1-methyl-3H-imidazol-1-ium chloride

	trimethylsilyl- propyl)ammonium chloride		trimethylsilylpropyl)-3H- imidazol-1-ium chloride
	3-{2-[4-(4-Amino-3- methylphenyl)[1,4]- diazepan-1-yl]-2- oxoethyl}-1-methyl-3H- imidazol-1-ium chloride		3-{2-[4-(4-Amino-3- methylphenyl)[1,4]- diazepan-1-yl]ethyl}-1- methyl-3H-imidazol-1-ium chloride
	{3-[4-(4-Amino-3- methylphenyl)[1,4]- diazepan-1-yl]- propyl}trimethylammonium chloride		{2-[4-(4-Amino-3- methylphenyl)[1,4]- diazepan-1-yl]ethyl}- trimethylammonium chloride
	3-{2-[4-(4-Amino-3- methylphenyl)[1,4]- diazepan-1-yl]propyl}-1- methyl-3H-imidazol-1-ium chloride		{2-[4-(4-Amino-3- methylphenyl)[1,4]- diazepan-1-yl]ethyl}(2- hydroxyethyl)- dimethylammonium chloride
	{3-[4-(4-Amino-3- methylphenyl)[1,4]- diazepan-1-yl]ethyl}- dimethyl(ethyl-2-methyl- 3H-imidazol-1-ium		1-{3-[4-(4-Amino-3- methylphenyl)[1,4]- diazepan-1-yl]propyl}-1- methylpyrrolidinium chloride

	chloride)ammonium chloride		
	{2-[4-(4-Amino-3-methylphenyl)[1,4]-diazepan-1-yl]ethyl}-dimethyl(3-trimethylsilylpropyl)ammonium chloride		3-{2-[4-(4-Amino-3-methylphenyl)[1,4]-diazepan-1-yl]ethyl}-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride
	{3-[4-(4-Amino-phenyl)[1,4]diazepan-1-yl]-2-hydroxypropyl}trimethylammonium chloride		{3-[4-(4-Amino-3-methylphenyl)[1,4]-diazepan-1-yl]-2-hydroxypropyl}trimethylammonium chloride
	3-{2-[4-(4-Amino-phenyl)piperazin-1-yl]-2-oxoethyl}-1-methyl-3H-imidazol-1-ium chloride		{3-[4-(4-Amino-phenyl)piperazin-1-yl]-2-hydroxypropyl}-trimethylammonium chloride
	3-{2-[4-(4-Amino-3-methylphenyl)piperazin-1-yl]-2-oxoethyl}-1-methyl-3H-imidazol-1-ium chloride		3-[4-(4-Amino-3-methylphenyl)piperazin-1-yl]-2-hydroxypropyl-trimethylammonium chloride

	3-{2-[4-(4-Amino-phenyl)piperazin-1-yl]ethyl}-1-methyl-3H-imidazol-1-ium chloride		{3-[4-(4-Amino-phenyl)piperazin-1-yl]propyl}trimethylammonium chloride
	3-{2-[4-(4-Amino-3-methylphenyl)piperazin-1-yl]ethyl}-1-methyl-3H-imidazol-1-ium chloride		{3-[4-(4-Amino-3-methylphenyl)piperazin-1-yl]propyl}trimethylammonium chloride
	1-{3-[4-(4-Aminophenyl)piperazin-1-yl]propyl}-1-methylpyrrolidinium chloride		1-{3-[4-(4-Amino-3-methylphenyl)piperazin-1-yl]propyl}-1-methylpyrrolidinium chloride

30. The nitro derivatives of formula (I')



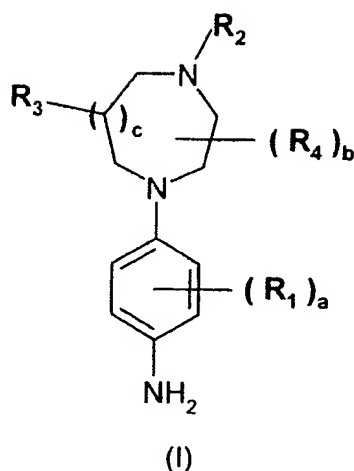
wherein:

- **a** ranges from 0 to 4, it being understood that when **a** is greater than or equal to 2, then the radicals R_1 may be identical or different,
- **b** ranges from 0 to 4, it being understood that when **b** is greater than or equal to 2, then the radicals R_4 may be identical or different,
- **c** is equal to 0 or 1,
- **R₁** is chosen from halogen atoms; C₁-C₈ aliphatic and alicyclic, saturated and unsaturated hydrocarbon-based chains, wherein at least one carbon atom is optionally replaced with at least one entity chosen from oxygen, nitrogen, silicon, and sulphur atoms and an SO₂ group; and an onium radical Z; with the proviso that the radical R_1 does not comprise a peroxide bond or diazo, nitro or nitroso radicals,
- **R₂** comprises an onium radical Z, wherein an onium radical is a nitrogen-based quaternary radical,
- **R₃** is chosen from
 - an alkyl radical;
 - an alkenyl radical;
 - an alkynyl radical;
 - a hydroxyl radical;
 - a hydroxyalkyl radical;
 - an alkoxy radical;
 - an alkoxyalkyl radical;
 - an alkylcarbonyl radical;
 - a hydroxyalkoxyalkyl radical;
 - an amino radical;

- a monoalkylamino radical;
- a dialkylamino;
- an aminoalkyl radical;
- an aminoalkyl radical wherein the amine is monosubstituted or disubstituted with at least one radical chosen from alkyl, acetyl and hydroxyalkyl radicals;
- a hydroxyl radical;
- a aminoalkyl radical;
- a carboxyl radical;
- a carboxyalkyl radical;
- a carbamoyl radical;
- a carbamoylalkyl radical;
- an alkoxycarbonyl radical;
- a monoalkylaminocarbonyl radical;
- a dialkylaminocarbonyl radical;
- a monoalkylaminocarbonylalkyl radical; and
- a dialkylaminocarbonylalkyl radical;
- **R₄** is chosen from
 - an alkyl radical;
 - an alkenyl radical;
 - an alkynyl radical;
 - a hydroxyalkyl radical;
 - an alkoxyalkyl radical;
 - an alkylcarbonyl radical;

- a hydroxyalkoxyalkyl radical;
- an aminoalkyl radical;
- an aminoalkyl radical wherein the amine is monosubstituted or disubstituted with at least one radical chosen from alkyl, acetyl and hydroxyalkyl radicals;
- a hydroxyl radical;
- a aminoalkyl radical;
- a carboxyl radical;
- a carboxyalkyl radical;
- a carbamoyl radical;
- a carbamoylalkyl radical;
- an alkoxy carbonyl radical;
- a monoalkylaminocarbonyl radical;
- a dialkylaminocarbonyl radical;
- a monoalkylaminocarbonylalkyl radical; and
- = a dialkylaminocarbonylalkyl radical.

31. A dye composition comprising, as oxidation base, at least one compound of formula (I), and the addition salts thereof



wherein:

- **a** ranges from 0 to 4, it being understood that when **a** is greater than or equal to 2, then the radicals R_1 may be identical or different,
- **b** ranges from 0 to 4, it being understood that when **b** is greater than or equal to 2, then the radicals R_4 may be identical or different,
- **c** is equal to 0 or 1,
- **R_1** is chosen from halogen atoms; C_1 - C_8 aliphatic and alicyclic, saturated and unsaturated hydrocarbon-based chains, wherein at least one carbon atom is optionally replaced with at least one entity chosen from oxygen, nitrogen, silicon, and sulphur atoms and an SO_2 group; and an onium radical **Z**; with the proviso that the radical R_1 does not comprise a peroxide bond or diazo, nitro or nitroso radicals,
- **R_2** comprises an onium radical **Z**, wherein an onium radical is a nitrogen-based quaternary radical,
- **R_3** is chosen from
 - an alkyl radical;
 - an alkenyl radical;

- an alkynyl radical;
- a hydroxyl radical;
- a hydroxyalkyl radical;
- an alkoxy radical;
- an alkoxyalkyl radical;
- an alkylcarbonyl radical;
- a hydroxyalkoxyalkyl radical;
- an amino radical;
- a monoalkylamino radical;
- a dialkylamino;
- an aminoalkyl radical;
- an aminoalkyl radical wherein the amine is monosubstituted or disubstituted with at least one radical chosen from alkyl, acetyl and hydroxyalkyl radicals;
- a hydroxyl radical;
- an aminoalkyl radical;
- a carboxyl radical;
- a carboxyalkyl radical;
- a carbamoyl radical;
- a carbamoylalkyl radical;
- an alkoxycarbonyl radical;
- a monoalkylaminocarbonyl radical;
- a dialkylaminocarbonyl radical;
- a monoalkylaminocarbonylalkyl radical; and

- a dialkylaminocarbonylalkyl radical;
- **R₄** is chosen from
 - an alkyl radical;
 - an alkenyl radical;
 - an alkynyl radical;
 - a hydroxyalkyl radical;
 - an alkoxyalkyl radical;
 - an alkylcarbonyl radical;
 - a hydroxyalkoxyalkyl radical;
 - an aminoalkyl radical;
 - an aminoalkyl radical wherein the amine is monosubstituted or disubstituted with at least one radical chosen from alkyl, acetyl and hydroxyalkyl radicals;
 - a hydroxyl radical;
 - a aminoalkyl radical;
 - a carboxyl radical;
 - a carboxyalkyl radical;
 - a carbamoyl radical;
 - a carbamoylalkyl radical;
 - an alkoxycarbonyl radical;
 - a monoalkylaminocarbonyl radical;
 - a dialkylaminocarbonyl radical;
 - a monoalkylaminocarbonylalkyl radical; and
 - a dialkylaminocarbonylalkyl radical.

32. The dye composition according to Claim 31, further comprising at least one coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthalene-based couplers, heterocyclic couplers, and the addition salts thereof.

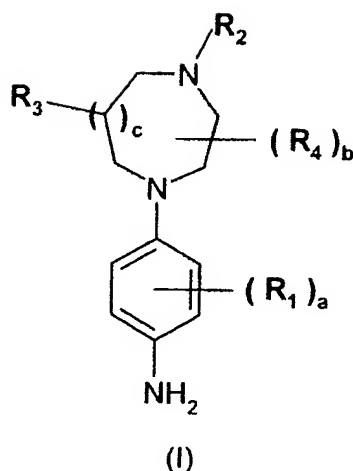
33. The composition according to Claim 31, comprising at least one additional oxidation base other than the compound of formula (I), chosen from para-phenylenediamines, bis(phenyl)alkylenediamines, para-aminophenols, ortho-aminophenols, heterocyclic bases, and the addition salts thereof.

34. The composition according to Claims 33, wherein, for the at least one compound of formula (I) and for the at least one additional oxidation base, if present, each oxidation base in the dye composition is present in an amount ranging from about 0.001% to about 10% by weight, relative to the total weight of the dye composition.

35. The dye composition according to Claim 32, wherein the at least one coupler is present in the dye composition in an amount ranging from about 0.001% to about 10% by weight, relative to the total weight of the dye composition.

36. The dye composition according to Claim 31, further comprising a cosmetic medium suitable for dyeing keratin fibers.

37. A process for the oxidation dyeing of keratin fibers, comprising applying a dye composition to the fibers in the presence of at least one oxidizing agent, for a time sufficient to develop a desired coloration, wherein the dye composition comprises, as an oxidation base, at least one compound of formula (I), and the addition salts thereof



wherein:

- **a** ranges from 0 to 4, it being understood that when **a** is greater than or equal to 2, then the radicals R_1 may be identical or different,
- **b** ranges from 0 to 4, it being understood that when **b** is greater than or equal to 2, then the radicals R_4 may be identical or different,
- **c** is equal to 0 or 1,
- R_1 is chosen from halogen atoms; C_1 - C_8 aliphatic and alicyclic, saturated and unsaturated hydrocarbon-based chains, wherein at least one carbon atom is optionally replaced with at least one entity chosen from oxygen, nitrogen, silicon, and sulphur atoms and an SO_2 group; and an onium radical Z; with the proviso that the radical R_1 does not comprise a peroxide bond or diazo, nitro or nitroso radicals,
- R_2 comprises an onium radical Z, wherein an onium radical is a nitrogen-based quaternary radical,
- R_3 is chosen from
 - an alkyl radical;
 - an alkenyl radical;

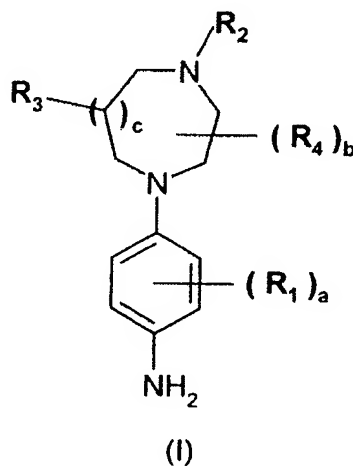
- an alkynyl radical;
- a hydroxyl radical;
- a hydroxyalkyl radical;
- an alkoxy radical;
- an alkoxyalkyl radical;
- an alkylcarbonyl radical;
- a hydroxyalkoxyalkyl radical;
- an amino radical;
- a monoalkylamino radical;
- a dialkylamino;
- an aminoalkyl radical;
- an aminoalkyl radical wherein the amine is monosubstituted or disubstituted with at least one radical chosen from alkyl, acetyl and hydroxyalkyl radicals;
- a hydroxyl radical;
- a aminoalkyl radical;
- a carboxyl radical;
- a carboxyalkyl radical;
- a carbamoyl radical;
- a carbamoylalkyl radical;
- an alkoxy carbonyl radical;
- a monoalkylaminocarbonyl radical;
- a dialkylaminocarbonyl radical;
- a monoalkylaminocarbonylalkyl radical; and

- a dialkylaminocarbonylalkyl radical;
- **R₄** is chosen from
 - an alkyl radical;
 - an alkenyl radical;
 - an alkynyl radical;
 - a hydroxyalkyl radical;
 - an alkoxyalkyl radical;
 - an alkylcarbonyl radical;
 - a hydroxyalkoxyalkyl radical;
 - an aminoalkyl radical;
 - an aminoalkyl radical wherein the amine is monosubstituted or disubstituted with at least one radical chosen from alkyl, acetyl and hydroxyalkyl radicals;
 - a hydroxyl radical;
 - a aminoalkyl radical;
 - a carboxyl radical;
 - a carboxyalkyl radical;
 - a carbamoyl radical;
 - a carbamoylalkyl radical;
 - an alkoxycarbonyl radical;
 - a monoalkylaminocarbonyl radical;
 - a dialkylaminocarbonyl radical;
 - a monoalkylaminocarbonylalkyl radical; and
 - a dialkylaminocarbonylalkyl radical.

38. The process according to Claim 37, wherein the at least one oxidizing agent is chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, peracids and oxidase enzymes.

39. The process according to Claim 37, wherein the at least one oxidizing agent may be added to the dye composition at the time of application to the fibers or it may be applied in the form of an oxidizing composition simultaneously or sequentially with the application of the dye composition.

40. A multi-compartment kit, wherein at least one first compartment comprises a dye composition comprising, as an oxidation base, at least one compound of formula (I), and the addition salts thereof



wherein:

- a ranges from 0 to 4, it being understood that when a is greater than or equal to 2, then the radicals R₁ may be identical or different,
- b ranges from 0 to 4, it being understood that when b is greater than or equal to 2, then the radicals R₄ may be identical or different,
- c is equal to 0 or 1,

- **R₁** is chosen from halogen atoms; C₁-C₈ aliphatic and alicyclic, saturated and unsaturated hydrocarbon-based chains, wherein at least one carbon atom is optionally replaced with at least one entity chosen from oxygen, nitrogen, silicon, and sulphur atoms and an SO₂ group; and an onium radical Z; with the proviso that the radical R₁ does not comprise a peroxide bond or diazo, nitro or nitroso radicals,
- **R₂** comprises an onium radical Z, wherein an onium radical is a nitrogen-based quaternary radical,
- **R₃** is chosen from
 - an alkyl radical;
 - an alkenyl radical;
 - an alkynyl radical;
 - a hydroxyl radical;
 - a hydroxyalkyl radical;
 - an alkoxy radical;
 - an alkoxyalkyl radical;
 - an alkylcarbonyl radical;
 - a hydroxyalkoxyalkyl radical;
 - an amino radical;
 - a monoalkylamino radical;
 - a dialkylamino;
 - an aminoalkyl radical;
 - an aminoalkyl radical wherein the amine is monosubstituted or disubstituted with at least one radical chosen from alkyl, acetyl and hydroxyalkyl radicals;

- a hydroxyl radical;
- a aminoalkyl radical;
- a carboxyl radical;
- a carboxyalkyl radical;
- a carbamoyl radical;
- a carbamoylalkyl radical;
- an alkoxy carbonyl radical;
- a monoalkylaminocarbonyl radical;
- a dialkylaminocarbonyl radical;
- a monoalkylaminocarbonylalkyl radical; and
- a dialkylaminocarbonylalkyl radical;
- **R₄** is chosen from
 - an alkyl radical;
 - an alkenyl radical;
 - an alkynyl radical;
 - a hydroxyalkyl radical;
 - an alkoxyalkyl radical;
 - an alkylcarbonyl radical;
 - a hydroxyalkoxyalkyl radical;
 - an aminoalkyl radical;
 - an aminoalkyl radical wherein the amine is monosubstituted or disubstituted with at least one radical chosen from alkyl, acetyl and hydroxyalkyl radicals;
 - a hydroxyl radical;

- a aminoalkyl radical;
- a carboxyl radical;
- a carboxyalkyl radical;
- a carbamoyl radical;
- a carbamoylalkyl radical;
- an alkoxycarbonyl radical;
- a monoalkylaminocarbonyl radical;
- a dialkylaminocarbonyl radical;
- a monoalkylaminocarbonylalkyl radical; and
- a dialkylaminocarbonylalkyl radical

and at least one second compartment comprises at least one oxidizing agent.